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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,095	08/15/2001	Indernmohan S. Monga	14985BAUS01U	1009
34845	7590	09/12/2005	EXAMINER	
STEUBING AND MCGUINNESS & MANARAS LLP 125 NAGOG PARK ACTON, MA 01720			PAYNE, DAVID C	
			ART UNIT	PAPER NUMBER
			2638	
DATE MAILED: 09/12/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/930,095

Applicant(s)

MONGA, INDERMOHAN S.

Examiner

David C. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: attachment pages 4 and 5 of (60225335).

ASON uses IP routing and MPLS-based protocols to set up and manage optical circuits. It also provides a UNI for clients of the ASON network to request a variety of end-to-end optical services.

OSA is an intelligent agent residing on end-systems interacting with the optical edge providing value-added services through the ASON-enabled optical core. OSA uses the ASON UNI to interact with ASON Optical Channel Controller (OCC) in order to communicate with the intelligent optical core and request switched optical paths to other UNI/OSA enabled end-systems. OSA can be viewed as a subsystem that understands client networks connected to ASON. FIG. 1A illustrates where OSA sits with respect to ASON and the optical network.

OSA provides more agility to the optical network based on service requirements of the end-systems connected to the ASON network. OSA can be used to support a number of different applications.

One exemplary OSA application is authenticated auto discovery. When an OSA end-system is connected to an ASON network, it discovers other authenticated OSA end-systems it can connect to. Then, given the attachment address of another OSA agent, ASON network can dynamically create an optical channel between the OSA agents with appropriate attributes. This feature can be used to provide VPN service based on network authentication. FIG. 2 depicts authenticated auto discovery with an OSA enabled storage device.

Another exemplary OSA application is policy-based bandwidth management. There can be a large number of services provided by OSA based on policies configured at the OSA client. The policies enable OSA to fully leverage the automatic switched capabilities of the Nortel intelligent optical core. Some examples of the services are:

**BW Allocation Monitor:** OSA monitors the bandwidth utilization of the connection to the optical core. Based on the policies configured, OSA can dial for more bandwidth if

utilization is high, tear down bandwidth if utilization is low, or just provide a bandwidth limiting function to avoid over-billing.

**Advanced reservation/Time of day:** OSA can initiate a UNI request to ask for a connection to another OSA endpoint at certain times in the day for a specified duration. This feature can be used for backup applications, where a branch office connects to the backup storage provider/facility for a limited time to execute the backup function. This feature can also provide extra bandwidth for certain times in order to handle pre-determined traffic surges.

**Bandwidth Broker/Auction:** It is predicted that with every service provider deploying fiber in large quantities, there will be an opportunity for a provider to have connections to multiple optical networks managed by different infrastructure providers. The optical edge box can use OSA to negotiate a connection to the other end based on price. OSA can query each optical provider network it is connected to for rate information for a certain service, for example, for a 10 G connection for 10 hours requiring 1:1 protection to a certain endpoint. The intelligent optical network can respond to such queries with rate information that varies with the current utilization of the particular optical network. OSA compares the rates and can choose the provider for the bandwidth reservation. This could be a function for the OSA-N.

Yet another exemplary OSA application is alternate site failover. This feature provides fast alternate site disaster recovery function. Currently, a failure in any network device or storage connected to the optical core, the layer 3 connections time out, causing the peer device to initiate a connection to another endpoint based upon IP routing information. This usually takes a long time and results in data loss. OSA can provide a feature where it informs the ASON about the backup device ahead of time, for example, when initiating a connection. ASON monitors its connections with OSA systems by polling them periodically. In case of an edge system failure, ASON detects it and automatically initiates a new connection to the backup device from the peer devices based on OSA configuration. This will provide a fast disaster recovery function or a pre-planned

### DETAILED ACTION

1. Regarding applicant's traverse of rejection based on non compliance of 35 U.S.C. 119 provisional application, arguments are not persuasive. Applicant recited passages on pages 4 and 5 make no mention of high-level and low-level requirements as claimed (see attached pages 4 and 5 from provisional application 60225335). Applicant attempts to tie certain items such as bandwidth utilization or pricing to aforementioned requirements without express indication in the provisional. However, applicant attempts to claim broadly in the instant application. Priority cannot be given to broadly claimed subject matter such as high and low level requirements where the provisional application makes no attempt to describe features as such. Applicant must claim subject matter in the manner it is disclosed in the provisional in order to obtain priority.
2. Regarding applicant's traverse of the Naveh reference as failing to teach optical networks. The Examiner disagrees. The reference clearly teaches, (col. 16 lines 9-21) optical networks, repeated herein:

"For example, communication interface 818 may be an integrated services digital network (ISDN) card or a modem to provide a data communication connection to a corresponding type of telephone line. As another example, communication interface 818 may be a local area network (LAN) card to provide a data communication connection to a compatible LAN. Wireless links may also be implemented. In any such implementation, communication interface 818 sends and receives electrical, electromagnetic or **optical signals** that carry digital data streams representing various types of information."

(emphasis added)

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3. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

**Priority**

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119 as follows:
2. The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

**Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim(s) 1, 2, 5, 6, and 7 is/are rejected under 35 U.S.C. 102(e) as being anticipated by Naveh et al. US 6,466,984 B1 (Naveh).

Re claims 1, 2, 6, and 7, Naveh disclosed

A method for managing connection quality for a user in an optical communication system, the method comprising: ascertaining high-level communication requirements and non-requirements of the user;

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determining a set of lower level communication services for the user based upon the high-level communication requirements and non-requirements of the user; and obtaining the lower-level communication services for the user. (see e.g., 11/1-15, 11/45-60, 17/10-24).

Re claim 5, the modified invention of Naveh and Schofield disclosed wherein obtaining the lower level communication services for the user comprises: interacting with peer users to obtain the lower level communication services for the user (see Naveh, col./lines: 5/19-67 and 6/1-35).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim(s) 3, 4, and 8-27 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Naveh et al. US 6,466,984 B1 (Naveh) and Schofield et al. US 20030212829 A1 (Schofield).

Re claims 3, 8, 9, 27, 12-20, 21, 23, and 24, Naveh disclosed a method of mapping/managing high-level requirements into low-level requirements in a network. Naveh does not disclose an optical service manager and UNI.

Schofield disclosed a method of managing optical services within a core network with users attached across a UNI. It would have been obvious to one of ordinary skill in the art at the time of invention to use the Naveh bandwidth management scheme in the Schofield network since the policy reservations tools discussed in Naveh such as Diffserv and RSVP are typically implemented in optical network.

Re claims 4, 10, 22 The modified invention of Naveh and Schofield disclosed wherein the core optical

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communication network comprises an automatically switched optical network (ASON) (see Schofield, par. 0071)

Re claim 11, 25, 26 The modified invention of Naveh and Schofield disclosed wherein obtaining the lower level communication services for the user comprises: interacting with peer users to obtain the lower level communication services for the user (see Naveh, col./lines: 5/19-67 and 6/1-35).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp



**David C. Payne**  
**Patent Examiner**  
**AU 2638**